



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Adress: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,462	01/28/2004	Masahiko Nagai	JP920020225US1	3166
56687	7590	11/12/2008	EXAMINER	
Driggs, Hogg, Daugherty & Del Zoppo Co., L.P.A.			SITTA, GRANT	
38500 CHARDON ROAD				
DEPT. LEN			ART UNIT	PAPER NUMBER
WILLOUGHBY HILLS, OH 44094			2629	
		MAIL DATE	DELIVERY MODE	
		11/12/2008	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/766,462	Applicant(s) NAGAI, MASAHIKO
	Examiner GRANT D. SITTA	Art Unit 2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 26 August 2008.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-20 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 28 January 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-146/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application

6) Other: _____

DETAILED ACTION

Specification

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: "computer readable medium" needs to be clearly defined in the specification. Examiner suggests, wherein a computer readable medium refers to a media, or storage device, that can be read and accessed directly by a computer. Such media include, but are not limited to: magnetic storage media, such as floppy discs, hard disc, storage medium, and magnetic tape; optical storage media such as CD-ROM; electrical storage media such as RAM and ROM.

Claim Objections

2. Claims 14 and 15 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Examiner suggests:

"14. (Previously presented) A computer program product comprising a computer readable medium and code stored on the medium which is effective when executing in a computer system to cause the system to perform the steps of claim 10.

15. (Previously presented) A computer program product comprising a computer readable medium and code stored on the medium which is effective when executing in a computer system to cause the system to perform the steps of claim 11. "

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Bilotti et al (6,622,012) hereinafter, Bilotti.

5. In regards to claim 14, Billotti teaches a computer readable medium and code stored on the medium which is effective when executing in a computer system to cause the system to perform one of the steps of claim 10. (col. 4, lines 10-37). Examiner points particularly to the step of claim 10 wherein detecting the physical proximity of two members (col. 4, lines 1-37) coupled for movement one relative to the other and determining the appropriateness detecting reception of a signal interaction normally indicative of initiation of a system operation (fig. 1 (18, 20 and 22) and (col. 4, lines 10-37).

Art Unit: 2629

6. In regards to claim 15, Billotti teaches a computer readable medium and code stored on the medium which is effective when executing in a computer system to cause the system to perform one of the steps of claim 11 (col. 4, lines 10-37). Examiner points to particularly the step of detecting the physical proximity (col. 4, lines 10-15) of the members and determining the appropriateness of initiating the system operation from close proximity of the members (col. 4, lines 1-37).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. Claims 1-13 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti et al (6,622,012) hereinafter, Bilotti, in view of Kammerer et. al (US 4,492,925) hereinafter, Kammerer.

10. In regards to claim 1,Bilotti discloses the limitations of apparatus comprising:
first and second members movable one relative to the other (fig. 1 (12, 14 and 16));

an element mounted in one of said members which initiates an action in the apparatus (fig. 1 (18));

a detector mounted in the other of said members which responds to the proximity of and detects the intensity of interaction with said element (fig. 1 (20)); and

Bilotti differs from the claimed invention in that Bilotti does not disclose an inhibitor mounted in said one of said members which selectively inhibits the intensity of interaction between said element and said detector in response to said element being moved into the proximity of the detector.

However, Kammerer teaches a system and method for an inhibitor mounted in said one of said members which selectively inhibits the intensity of interaction between said element and said detector in response to said element being moved into the proximity of the detector; (col. 1, lines 30-37 and col. 5, lines 5-15 of Kammerer).

Examiner notes the inhibitor is the damping circuit of Kammerer.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti to include the use of an inhibitor mounted in said one of said

members which selectively inhibits the intensity of interaction between said element and said detector in response to said element being moved into the proximity of the detector; as taught by Kammerer in order to improved testing and evaluation circuit which allows a continuous monitoring of trouble-free operation of a proximity switch as stated in (col. 1, lines 30-37 of Kammerer).

Therefore, Bilotti as modified by Kammerer teaches a processor driving (fig. 1 (22) Bilotti)the inhibitor (col. 5, lines 5-15 Kammerer) based on an output of the detector (fig. 1 (20) Bilotti) and configured to determine whether the first member is in physical proximity to the second member based on said output (fig. 1 (12, 14 and 16) Bilotti and col. 1, lines 30-37 Kammerer).

11. In regards to claim 8, Bilotti discloses apparatus comprising:
 - a portable computer system body having a keyboard therein (col. 3, lines 18-30);
 - a portable computer system (col. 3, lines 18-30) lid having a display therein (fig. 1 (14));
 - a coupling joining (fig. 1 (16)) said body and said lid together for movement thereof one relative to the other between open and closed positions (col. 3, lines 18-67); and
 - a proximity detection subsystem which determines whether said body and said lid are in the closed position (fig. 1 (18, 20 and 22)), said subsystem comprising:
 - an element mounted (fig. 1 (20)) in one of said body and said lid which initiates an action in the apparatus (col. 4, lines 1-37);

a detector mounted in the other of said body and said lid (fig. 1 (18)) which responds to the proximity of and detects the intensity of interaction with said element (col. 4, lines 1-37, "Hall effect device");

Bilotti differs from the claimed invention in that Bilotti does not disclose an inhibitor mounted in said one of said body and said lid which selectively inhibits the intensity of interaction between said element and said detector in response to the element being moved into the proximity of the detector;

However, Kammerer teaches a system and method for an inhibitor mounted in said one of said body and said lid which selectively inhibits the intensity of interaction between said element and said detector in response to the element being moved into the proximity of the detector (col. 1, lines 30-37 and col. 5, lines 5-15 of Kammerer). Examiner notes the inhibitor is the damping circuit of Kammerer.

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti to include the use of an inhibitor mounted in said one of said body and said lid which selectively inhibits the intensity of interaction between said element and said detector in response to the element being moved into the proximity of the detector as taught by Kammerer in order to improved testing and evaluation circuit which allows a continuous monitoring of trouble-free operation of a proximity switch as stated in (col. 1, lines 30-37 of Kammerer).

Therefore, Bilotti as modified by Kammerer teaches a processor driving (fig. 1 (22) Bilotti)the inhibitor (col. 5, lines 5-15 Kammerer) based on an output of the detector (fig. 1 (20) Bilotti) and configured to determine whether the lid and body are in the

Art Unit: 2629

closed (abstract Bilotti) position based on said output (fig. 1 (12, 14 and 16) Bilotti and col. 1, lines 30-37 Kammerer)

12. In regards to claim 10, Bilotti discloses the limitations of a method comprising:
detecting reception of a signal interaction of two members coupled for movement
one relative to the (fig. 1 (12 , 14, and 16)) other normally indicative of initiation of a
system operation (col. 3, lines 18-30 and abstract);
detecting a physical proximity of the two members and determining the
appropriateness of initiating the system operation from close proximity of the members
(col. 3, lines 18-67).

Bilotti differs from the claimed invention in that Bilotti does not disclose
selectively inhibiting reception of the signal interaction in response to the detected
reception.

However, Kammerer teaches a system and method for selectively inhibiting
reception of the signal interaction in response to the detected reception (col. 1, lines 30-
37 and col. 5, lines 5-15 of Kammerer).

It would have been obvious to one of ordinary skill in the art, at the time of the
invention, to modify Bilotti to include the use of selectively inhibiting reception of the
signal interaction in response to the detected reception as taught by Kammerer in order
to improved testing and evaluation circuit which allows a continuous monitoring of

trouble-free operation of a proximity switch as stated in (col. 1, lines 30-37 of Kammerer).

13. In regards to claim 11, Bilotti discloses the limitations of a method comprising:
monitoring an output of a detector mounted in one of two members (fig. 1 (12, 14, and 16)) coupled for movement one relative to the other based on signal interaction of an element (col. 3, lines 18-30 and abstract) in the other member with the detector ((fig. 1 18, and 20)):

detecting an output normally indicative of initiation of a system operation (fig. 1 (22) and col. 3, lines 18-67);

detecting a physical proximity of the members and determining the appropriateness of initiating the system operation from close proximity of the members (col. 3, lines 18-67).

Bilotti differs from the claimed invention in that Bilotti does not disclose selectively inhibiting the signal interaction of the element with the detector in response to the detecting the signal interaction.

However, Kammerer teaches a system and method for selectively inhibiting the signal interaction of the element with the detector in response to the detecting the signal interaction (col. 1, lines 30-37 and col. 5, lines 5-15 of Kammerer).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti to include the use of selectively inhibiting the signal

interaction of the element with the detector in response to the detecting the signal interaction as taught by Kammerer in order to improved testing and evaluation circuit which allows a continuous monitoring of trouble-free operation of a proximity switch as stated in (col. 1, lines 30-37 of Kammerer).

14. In regards to claim 2, Billotti teaches wherein said element is free of any necessity of application of an external source of power (fig. 1 (18)) col. 3, lines 40 "magnet").

15. In regards to claim 3, Billotti teaches wherein said detector responds to one of an electromagnetic wave, an electric field, *a magnetic field*, corpuscular radiation, and an acoustic wave (fig. 1 (20) col. 3-4, lines 63-9).

16. In regards to claim 4, Billotti as modified by Kammerer teaches wherein said element is a magnet (fig. 1 (18) and col. 3, line 40 Billotti), said detector is a Hall effect switch (col. 4, lines 23-37 Billotti) responsive to imposition of a magnetic field (col. 4, lines 23-37 Billotti), and said inhibitor is a coil generating a magnetic field opposing the field of said magnet (col. 1, lines 1-15 inductive dampingin Krammer).

17. In regards to claim 6, Billotti teaches wherein one of said members is the lid of a portable computer system having a display therein and the other of said members is the body of a portable computer system having a keyboard therein (col. 3, lines 29-30).
18. In regards to claim 7, Billotto as modified by Kammerer teaches wherein said inhibitor is responsive to a coded driving signal (col. 5, lines 5-50 periodic damping Examiner notes applying periodicity currents as stated by Kammerer such as alternating currents or pulse currents are coded driving signals because they contain start/falling information) and further wherein said inhibitor, said element and said detector cooperate in determining the physical proximity of said members one relative to the other by detection of the coded driving signal (fig. 1 (18, 20 and 22 of Billotto) col. 2, lines 33-53).
19. In regards to claim 9, Billotti as modified by Kammerer teaches wherein said element is a magnet (fig. 1 (18) and col. 3, line 40 Billotti), said detector is a Hall effect switch (col. 4, lines 23-37 Billotto) responsive to imposition of a magnetic field (col. 4, lines 23-37 (Billotto), and said inhibitor is a coil generating a magnetic field opposing the field of said magnet (col. 5, lines 5-50 Kammerer) further comprising a microprocessor (fig. 1 (22) of Billotti) operatively connected to control excitation of said coil (col. 1, lines 1-15 inductive damping Krammer).

20. In regards to claim 12, Billotti as modified by Krammer teaches wherein the selective inhibition (col. 1, lines 30-37 and col. 5, lines 5-15 of Kammerer) of response occurs in response to detection that the members are withdrawn one from the other (col. 4, lines 10-37 of Billotti).

21. In regards to claim 13, Billotti as modified by Kammerer teaches wherein selective inhibition (col. 5, lines 5-37 Kammerer Examiner notes the test is done periodically) of response is discontinued in response to detection that the members are in close proximity one to the other (col. 4, lines 10-37 (Billotti)).

22. In regards to claim 19, Billotti further including preventing detection of the output (inherent since computers include power switches).

23. In regards to claim 20, Billotti as modified by Kammerer teaches wherein the inhibitor is activated by a power supply external to the inhibitor (fig. 1 (220 v) Kammerer).

24. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Kammerer, in view of Deczky (4,294,682) hereinafter, Deczky.

25. In regards to claim 5, Billotti as modified by Kammerer do not disclose wherein said element is a light source, said detector is a photoelectric device, and said inhibitor is a light shield.

However, Deczky teaches wherein said element is a light source, said detector is a photoelectric device, and said inhibitor is a light shield (col. 4, lines 12-25)

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Billotti and Kammerer to include the use of wherein said element is a light source, said detector is a photoelectric device, and said inhibitor (col. 1, lines 30-37 and col. 5, lines 5-15 of Kammerer) is a light shield as taught by Deczky in order to provide use of preferred materials since optical material are not susceptible to malfunction magnetic clips and other problems as stated in Applicant's disclosure.

26. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Kammerer, in view of Bartingale et. al (US 2003/0048102) hereinafter, Bartingale.

27. In regards to claim 16, Bilotti as modified by Kammerer disclose the limitations of claim 1 wherein the element is a magnet (fig. 1 (18) of Bilotti).

Bilotti and Kammerer differ from the claimed invention in that Bilotti and Kammerer do not disclose further including a noise magnetic field filter that filters external magnetic noise, thereby mitigating interaction between the external magnetic

noise and the detector when the first and second members are in close proximity to each other.

However, Bartingale teaches including a noise magnetic field filter that filters external magnetic noise, thereby mitigating interaction between the external magnetic noise and the detector when the first and second members are in close proximity to each other ([0040 and 0043] of Bantingale).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti and Kammerer to include the use of method further including a noise magnetic field filter that filters external magnetic noise, thereby mitigating interaction between the external magnetic noise and the detector when the first and second members are in close proximity to each other as taught by Bantingale in order to remove an noise that may cause interference as stated in ([0400] of Bantingale).

28. In regards to claim 18, Bilotti as modified by Kammerer disclose the limitations of claim 10.

Bilotti and Kammerer differ from the claimed invention in that Bilotti and Kammerer do not disclose further including filtering noise that mimics the signal when the members are in a first position, with respect to each other, where the signal is not detected.

However, Bantingale teaches further including filtering noise that mimics the signal when the members are in a first position, with respect to each other, where the signal is not detected ([0040 and 0043] of Bantingale).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti and Kammerer to include the use of method further including filtering noise that mimics the signal when the members are in a first position, with respect to each other, where the signal is not detected as taught by Bartingale in order to remove a noise that may cause interference as stated in ([0400] of Bartingale).

29. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bilotti as modified by Kammerer, in view of Sunter et. al (US 5,323,011) hereinafter, Sunter.

30. In regards to claim 17, Bilotti as modified by Kammerer disclose the limitations of claim 8.

Bilotti and Kammerer differ from the claimed invention in that Bilotti and Kammerer do not disclose wherein the detector responds to corpuscular radiation.

However, Suntar teaches a system and method for wherein the detector responds to corpuscular radiation (col. 1, lines 35-46 of Suntar).

It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Bilotti and Kammerer to include the use of method for wherein the detector responds to corpuscular radiation as taught by Suntar in order to provide another detection means as stated in (col. 1, lines 35-46 of Suntar).

Response to Arguments

31. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

32. In response to Applicant's request for issue of a new non-final Office action. Examiner respectfully disagrees. Claims 14 and 15 are improper because they require only one of the step to be preformed from the claims from which they depend. Thus, the dependent claims are broader than the claims from which they depend. Therefore, the limitation that were brought in to reject claims 10 and 11 where not necessary for the rejection of claims 14 and 15 because of their improper dependency. The rejection is maintained.

Conclusion

33. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GRANT D. SITTA whose telephone number is (571)270-1542. The examiner can normally be reached on M-F 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on 571-272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sumati Lefkowitz/
Supervisory Patent Examiner, Art Unit 2629

/Grant D Sitta/
Examiner, Art Unit 2629
October 31, 2008